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ABSTRACT

Part of the Anthropology Curriculum Project, the document introduces basic archaeological methods. It is intended for use by students in 5th grade social studies courses. The document contains a programmed text, a pronunciation guide for archaeological terms, and a multiple-choice test. The bulk of the document, the programmed text, proceeds according to a question/answer format. Students are directed to fill in blanks, complete language puzzles, match correct responses, define terms, and circle correct answers. They are then directed to proceed through the text to find correct responses to the questions. The pronunciation guide lists and divides into syllables over 25 vocabulary terms from the programmed text. The archaeological methods test presents 50 multiple-choice questions based on the text. An answer key is provided. Also available to accompany the unit is a tape to aid students in acquiring the new vocabulary. (DB)

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ARCHEOLOGICAL METHODS

A Programmed Text

by

Georgelle Thomas

Research and Development Center in
Educational Stimulation and
Anthropology Curriculum Project

University of Georgia

February, 1967

(The material in this programmed book parallels the Archeological Methods sections of THE DEVELOPMENT OF MAN AND HIS CULTURE: Pupil Text and Pupil Guide, Grade 5, developed by The Anthropology Curriculum Project, University of Georgia, Athens, Georgia)

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INTRODUCTION

We hope you will like this book! It is called a PROGRAMMED textbook.

This book is different from most books you have read. Not only will it tell you things, it will ask you questions about what it tells you. By reading the book carefully and answering all the questions it asks, you will learn quickly and well.

Be sure you answer the questions on the page you are reading, but DO NOT look on any page except the one you are on. DO NOT turn back to a page to find an answer. DO NOT turn to the next page to find an answer.

Sometimes if you miss a question, you will have to write the correct answer before you go on. Just be sure you take your time and follow directions.

Sometimes you will be told to skip a page. Be sure you do exactly as the book says.

Here are two things to do:

1. TAKE YOUR TIME
2. FOLLOW DIRECTIONS

Your Name _____

Your School _____

Your Teacher's Name _____

Did you study Anthropology last year? _____

People born thousands of years from now can learn about our customs and ways of life. They can read books, look at movies, or listen to recordings. People in the future will be able to learn about us from our writings, our recorded music, our motion pictures, and other written and spoken records.

BUT

How can we learn about the people who lived thousands of years ago? How can we study man and his way of life before writing, or movies, or records were even invented?

This book will tell you how! It is about ARCHEOLOGY. ARCHEOLOGY is the science that studies how man lived long ago. This book will tell you how the science of ARCHEOLOGY helps us to learn about the life of the people who lived long ago.

Fill in the blank:

1. The science that studies how people lived long ago is called _____.

When you finish, turn the page and check your answer.

Answer:

ARCHEOLOGY. If you missed it, put "X" by your answer, and write the correct answer on the line at the bottom of page 1. Learn to check all your answers very carefully! You will enjoy this booklet a lot more if you follow directions exactly. If you did not miss it, continue reading below.

ARCHEOLOGY is the science that studies man's way of life thousands of years ago.

ARCHEOLOGISTS are the scientists who study ARCHEOLOGY.

Fill in the blank:

1. The scientists who study archeology are called _____.

Please turn the page.

Answer:

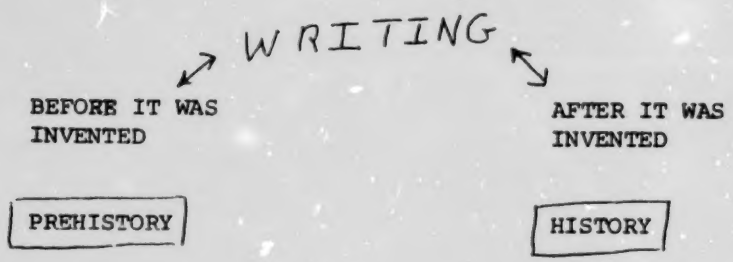
ARCHEOLOGISTS. Check your answer carefully. If you missed it, put "X" by your answer, and write the correct answer on the line at the bottom of page 2.

Archeologists study the people of long ago. They often study PREHISTORIC people.

PREHISTORIC simply means "before written records."

The long time before writing was invented is called PREHISTORY. When writing was invented and man began to keep records of events, HISTORY began.

Here is something to learn:



Archeologists study people who lived a very long time ago. They study prehistoric people, as well as people who used writing to keep records.

Fill in the blank:

People who lived before the invention of writing are called _____ people.

(historic, prehistoric)

Answer:

PREHISTORIC. Put "X" by your answer if you missed it, and write the correct answer on the line at the bottom of page 4. If you did not miss it, continue reading.

Archeologists are scientists who study ANCIENT people. "Ancient people" are people who lived long ago.

Archeologists study ancient man's WAY OF LIFE or his CULTURE. CULTURE is all of the things that make up ways of living. CULTURE includes things like:

The way people eat

The houses people live in

The language people speak

The way people worship God

Different groups of people have different CULTURES. For example, our culture is different from the Eskimo's culture. We eat different things. We live in different kinds of houses. We speak a different language.

You can find the answers to these questions on this page. Take your time and get them correct.

1. A man who lived a very long time ago is an

A _ _ _ _ _ _ T man.

2. A word that means "ways of life" is the word,

C _ _ _ _ _ _ E.

Answers:

1. A N C I E N T
2. C U L T U R E

I bet you got those right! Good!

In archeology we study the culture of prehistoric people. Prehistoric people lived before writing was invented. How do you suppose we can find out about them? Archeologists find out about them by studying the things they made.

THINGS MADE BY MAN ARE CALLED ARTIFACTS.

Anything at all that is made by people is an ARTIFACT. This includes all sorts of things from a stone axe to a coat to a rocket. IF it is MAN-MADE, it is an ARTIFACT.

Put " " by the object that is an artifact:

____ leaf (if you mark this, turn to page 8)

____ piece of pottery (if you mark this, turn to page 7)

RIGHT! GOOD!

Anything at all that is man-made is an artifact.

Let's look at the objects below and mark "✓" by the ones that are artifacts.

_____ Boat

_____ Animal bone

_____ Shoe

_____ Paper clip

_____ Rock

When you finish, skip page 8 and turn to page 9.

A leaf of a tree is NOT an artifact.

Remember, please that an artifact is MADE BY MAN. A leaf is grown by a tree; man cannot make a leaf.

Turn back to page 6 and make another choice.

Answers:

✓ Boat

_____ Animal Bone

✓ Shoe

✓ Paper clip

_____ Rock

Put "X" on page 7 by the ones you missed. If you did not miss ANY, turn to page 10 right now.

Did you miss some? Well, remember that ARTIFACTS ARE THINGS MADE BY MAN. Look again at the items listed at the top of this page. The ones that have "✓ " by them are ARTIFACTS.

Here are some review words. See how many you can get right. You will NOT be graded, but DO YOUR BEST. This will show you how much you have learned.

Match the correct numbers with the words:

_____ Culture	1. man-made object
_____ Artifact	2. leaf of a tree
_____ Archeologists	3. scientists who study ancient man and his culture
_____ Historic	4. before writing was invented
	5. way of life of a group of people
	6. after writing was invented

When you finish, turn to page 11.

Answers:

5 Culture

1 Artifact

3 Archeologists

6 Historic

Put "X" on page 10 by the ones you missed. Wait a minute. Did you check ALL your answers carefully? If you did not miss ANY, turn right now to page 13.

If you missed some, turn to page 12.

Sorry you missed some! But maybe I can help you get straightened out.

ARCHEOLOGISTS

Archeologists are sciantists who study archeology. What is archeology? Archeology is the study of people and their culture a very long time ago. We are going to learn how archeologists learn about these prehistoric people and their culture.

ARTIFACTS

Artifacts are things made by people. If it is man-made, it is an artifact. Look at these examples:

These ARE artifacts	These are NOT artifacts
pencil	trees
school building	sand
windows	animals
bed	clouds

CULTURE

Culture includes all the ways of life of a group of people.

CULTURE = WAY OF LIFE

HISTORIC

Historic describes events or people after the invention of writing.

Prehistoric means before writing was invented.

Archeologists want to find out about the people who lived thousands of years ago. They CANNOT learn about them by going to see them or writing them letters. That is silly because people who lived thousands of years ago are no longer living.

Then how can we learn about these people of long ago? The best thing to do is to study the artifacts they made.

How would you learn about people who lived long ago?

_____ Telephone them

_____ Study the things they made

Of course you marked "Study the things they made" because there is no way to telephone someone who lived thousands of years ago!

Archeologists learn about the culture of prehistoric people by studying the artifacts they made. Since prehistoric people did not have writing, the only way we can learn about them is by studying the things they made.

One big problem is that all artifacts will not last a long time. A lot of things that people made long ago have rotted and decayed. Some materials last; other materials do not last.

Circle the correct answer below:

TRUE FALSE

An iron post will rot or decay sooner than a straw mat.

Answer:

FALSE

Put "X" on page 14 if you missed this.

A straw mat is ORGANIC material.

An iron post is INORGANIC material.

I want to tell you more about ORGANIC material. The most important thing to remember is: ORGANIC MATERIAL COMES FROM EITHER PLANTS OR ANIMALS.

Just to help you remember, all three of the following begin with the letter, "O":

OWLS

OAK TREES

ORGANIC

Owls are animals.
Oak trees are plants. } BOTH ARE ORGANIC

"Owls in oak trees are organic."

ORGANIC material comes from plants or animals. You already know that when plants or animals are no longer living, they change. They rot or decay.

SO

ORGANIC material

(1) is made from plants or animals

(2) will rot or decay

Circle the correct answers:

1. Wool comes from AN ANIMAL A PLANT
2. Wood comes from AN ANIMAL A PLANT
3. Cotton comes from AN ANIMAL A PLANT
4. Leather comes from AN ANIMAL A PLANT

Turn the page.

Answers:

1. AN ANIMAL
2. A PLANT
3. A PLANT
4. AN ANIMAL

Put "X" by the ones you missed on page 16.

Did you miss any?

_____ no (Turn to page 19)

_____ yes (Turn to page 18)

Here are the same questions again. I don't want you to answer them right now. I do want you to skip down the page to the "***". Start reading at the "***", and follow all directions.

1. Wool comes from	AN ANIMAL	A PLANT
2. Wood comes from	AN ANIMAL	A PLANT
3. Cotton comes from	AN ANIMAL	A PLANT
4. Leather comes from	AN ANIMAL	A PLANT

* * *

1. Wool comes from sheep. Circle the correct answer to question 1 above.
2. Wood comes from trees. It comes from pine trees, walnut trees, and other trees. Circle the correct answer to question 2
3. Cotton is grown in fields; it grows from a seed. This should give you a clue to the answer to question 3. Circle it.
4. Leather is skin that has been specially treated. It could be made from the skin of cows, pigs, or even snakes. Circle the correct answer to question 4.

When you finish, check your answers by looking at the top of page 17. Then turn to page 19.

Fill in the blanks:

Organic material comes from (1) _____ and

(2) _____. Organic material will decay or

(3) _____.

Answers:

Organic material comes from (1) PLANTS and (2) ANIMALS. Organic material will decay or (3) ROT.

Put "X" by the ones you missed on page 19.

INORGANIC material is easy to understand if you know the meaning of the word, organic. INORGANIC is just about the opposite of organic.

Fill in the blank:

If "Incomplete" means "not complete", then "inorganic" means " ___ organic."

Answer: "__ __ __ organic."

INORGANIC means

(1) not made from animals or plants

(2) will not rot or decay

Here are some examples of INORGANIC materials:

stone

glass

metal

These materials are not made from plants or animals. They are not made from anything that has ever been alive. They will not rot and decay. They are INORGANIC materials.

Take your time and fill in the blanks:

1. _____ material is not made from a plant.
2. If materials will rot or decay, it is _____ material.
3. Straw is _____ material.
4. Iron is _____ material.

Answers:

1. INORGANIC
2. ORGANIC
3. ORGANIC
4. INORGANIC

Be sure to check your answers carefully. Put "X" by the ones you missed.

Remember:

ORGANIC = PLANTS AND ANIMALS = WILL DECAY

INORGANIC = WILL NOT DECAY

Man used both ORGANIC and INORGANIC materials to make artifacts.

Which artifacts would last the longest?

____ Ones made of organic material (turn to page 24)

____ Ones made of inorganic material (turn to page 23)

RIGHT! GOOD!

Inorganic materials last longer than organic materials.

Turn to page 25. Skip page 24.

WRONG!

Organic materials are made from animals or from plants.

Organic materials will rot or decay.

Turn to page 22 and make another selection.

Inorganic materials last longer than organic materials. Inorganic materials do not decay.

This means that the very old artifacts that archeologists find are usually made of INORGANIC materials. ORGANIC artifacts are not found because they do not last.

This is important for you to understand:
NOT ALL THE ARTIFACTS THAT PREHISTORIC MAN MADE HAVE LASTED. Most of the artifacts that have been found were made of inorganic material.

Only inorganic artifacts last. We do not know much about the organic artifacts made long ago. Prehistoric man could have made many artifacts out of organic material that have rotted away.

This is one reason we do not know everything about ancient people: some of their artifacts were made of organic material. These artifacts did not last.

Another reason why we do not know all about prehistoric people is because they did not keep written records. All that we know about them is what we can learn from their artifacts, the things they made. We do not know much about their language, their games, their songs because they did not write. They did not keep records of these things. The only parts of their culture that we know about are their artifacts that we have found.

So, our knowledge of prehistoric man is not complete. Put "✓" by the two reasons that we do not know all about prehistoric people.

____A. We cannot read their writing

____B. They did not leave any written records

____C. Their organic artifacts have rotted

____D. They did not make any artifacts

When you have marked two choices, turn the page.

Answers:

✓ B

✓ C

Put "X" by the ones you missed.

If you did not miss any, turn right now to page 28.

If you missed some, please go back and read page 26 VERY CAREFULLY. Read the whole page. After you have read the page again, put the letters of the correct answers on the lines at the bottom of page 26.

You have learned a lot! I want to show you how much. You will NOT get a grade on these questions but do your BEST to answer them right. Put "✓" by the right answer.

1. A word which means "way of life" is

   ____archeology

   ____culture

2. Material that is made from something that was living is

   ____organic material

   ____inorganic material

3. Which of these is an artifact?

   ____basket

   ____river

4. Material that will rot or decay is

   ____organic material

   ____inorganic material

5. How do we describe the people who lived before written records were kept?

   ____historic

   ____prehistoric

Please turn the page.

Answers:

1. culture
2. organic material
3. basket
4. organic material
5. prehistoric

Check your answers CAREFULLY. Put "X" by those you missed. Did you miss any?

____Yes (Turn to page 30)

____No (Turn to page 31)

I am sorry you goofed. Let me help you get on the right track. I'll repeat the question and mark the correct answer. I will explain the correct answer, too.

1. A word that means "way of life" is
   ____archeology ✓ culture
   Remember, I told you that culture is all of the things that make up ways of living.

CULTURE = WAY OF LIFE

They are equal to each other.

2. Material is made from something that was living is
   ✓ organic ____inorganic
   Owl, oak tree, and organic. They all begin with "O". Organic means made from plants (example: oak trees) or animals (example: owls). Plants and animals are living.

3. Which of these is an artifact?
   ✓ basket ____river
   An artifact is a man-made object, so basket is the right answer.

4. Material that will rot or decay is
   ✓ organic ____inorganic
   Organic material is made from plants or animals. It is true that after death, plants and animals decay.

5. How do you describe the people who lived before written records were kept?
   ____historic ✓ prehistoric

WRITING

Before writing ↙ ↘ Since writing was invented

Prehistoric Historic

I have said that archeologists study artifacts. Where do they find these artifacts? Most of the time, artifacts are buried in the ground. How in the world do they get BURIED?

Here are three ways they can get buried:

1. BURIED ON PURPOSE

Long ago, people buried all sorts of objects with the dead. Things like bowls and tools and weapons were often buried in graves because people thought that the dead could use these things.

2. BURIED BY EARTHQUAKE AND VOLCANOS

It doesn't happen very often but sometimes things get buried by a volcano or earthquake. Whole towns and villages have been suddenly buried this way.

3. BURIED AS TIME PASSED

If something is just left, <u>as time passes</u>, it can get buried. Imagine a campsite or village that people have left. Roofs cave in, walls fall down, dirt settles on things, plants grow up. In thousands and thousands of years a deserted campsite or village could be completely buried.

Artifacts or even whole towns, can be buried. The three ways I told you about are:

1. BURIED ON PURPOSE
2. BURIED BY EARTHQUAKE AND VOLCANOS
3. BURIED AS TIME PASSED

Put "✓" by the correct answer:

1. If you lose a penny in the woods and nobody finds it, after a while it will get covered over.

   The penny was

   ____A. buried on purpose

   ____B. buried as time passed

2. An archeologist digs up a skeleton. Near the skeleton are several stone arrowheads and a metal necklace. The arrowheads and necklace were probably

   ____A. buried on purpose

   ____B. buried as time passed

Answers:

1.

✓ B

2.

✓ A

Check your answers carefully! Put "X" by the ones you missed.

If you did not miss any, turn to page 34 RIGHT NOW. You do not need to read any more on this page.

If you missed question 1, turn to page 31 and read 3. BURIED AS TIME PASSED.

If you missed question 2, turn to page 31 and read 1. BURIED ON PURPOSE.

When you have followed the directions above, put a "✓ " on the line at the bottom of page 31. Then turn to page 34.

Artifacts that stay buried are not useful to an archeologist. Archeologists cannot study artifacts that are covered with dirt. The first thing the archeologist has to do is dig the artifacts out of the ground.

The places where archeologists dig to find artifacts are called SITES.

How do archeologists choose the SITES they will dig? They do not go out and dig just any old place. They would not go out and dig up your backyard or the basement of your school. They would have to have some clue that they might find artifacts before they would dig a SITE.

Fill in the blank:

1. The location or place where an archeologist digs for artifacts is called a _____.

Answer:

SITE

If you missed it, put "X" by your answer. Then put the right answer on the line at the bottom of page 34.

What sorts of clues do archeologists use to find sites?

Some clues turn up by CHANCE. Someone on a picnic might find an old Indian artifact. Maybe, workmen digging a swimming pool might find pieces of an ancient pottery bowl. These are examples of finding a site by CHANCE.

Another way that archeologists get clues about sites is EROSION. EROSION is the slow wearing away of soil by wind or water. After a real hard rain, have you ever seen places where the soil is washed away? This is EROSION. Sometimes EROSION will uncover a buried site.

WRITTEN RECORDS sometimes give clues about sites. Archeologists study written records. Then they ask questions, and they look at maps. These things give clues about sites.

Archeologists can get clues from AERIAL PHOTOGRAPHY. This means that they go up in airplanes and take pictures of the ground below. Sometimes these pictures give clues about sites:

I'll repeat some of the clues that archeologists use to find sites:

1. chance discoveries
2. erosion
3. written records
4. aerial photography

Pretend you are an archeologist looking for a site.

1. If you go up in an airplane, what kind of clue can you get? _____
2. If someone brings you an arrowhead his dog has dug up, what kind of clue is this? _____
3. You find a very sandy place where the wind blows very hard most of the time. If the wind blows the sand away from a buried artifact, what is this called? _____
4. You read a tale about an old Indian village near your town. You use what you read to help you find a site. What kind of clue is the tale? _____

Answers:

1. Aerial photography
2. Chance discovery
3. Erosion
4. Written records

If you got all the questions correct, turn to page 38 right now. You do not need to read the rest of this page.

You missed some? Then read below:

Aerial photography just means taking pictures of the ground from an airplane.

Chance discovery is just "luck." It is just accidentally finding something.

Erosion happens when water or the wind wears something away.

Written records can be facts or stories. Things that we read are written records.

REVIEW

Use the words listed below to fill in the blanks. When you use a word, mark through it. After you have used a word one time, you will not need to use it again. You will not use all the words in the list. Work carefully.

ARCHEOLOGY	HISTORIC
ARTIFACTS	INORGANIC
CHANCE	ORGANIC
CULTURE	PREHISTORIC
EROSION	SITES

The science of (1) _____ studies ancient man and his way of life or his (2) _____. Some of these people lived before writing was invented, so there are no written records of their customs and habits. Since they had no writing, they are called (3) _____ people. Archeologists learn about these people from the things they made. These man-made things are called (4) _____.

Usually these objects are buried, and the places where archeologists dig to find them are called (5) _____. Things can be buried on purpose, by volcanos and earthquakes, or just by dirt and dust collecting over thousands and thousands of years.

Archeologists do not know all about ancient people because some of the things they made have not lasted. Artifacts that are made from plants and animals do not last; these things are made from (6) _____ material. Artifacts made from (7) _____ material do not rot, so these are the ones that archeologists usually find.

Here is the way you should have filled in the blanks. Check your answers carefully and put "X" by each one you missed. CHECK CAREFULLY.

The science of (1) ARCHEOLOGY studies ancient man and his way of life or his (2) CULTURE. Some of these people lived before writing was invented, so there are no written records of their customs and habits. Since they had no writing, they are called (3) PREHISTORIC people. Archeologists learn about these people from the things they made. These man-made things are called (4) ARTIFACTS.

Usually these objects are buried, and the places where archeologists dig to find them are called (5) SITES. Things can be buried on purpose, by volcanos and earthquakes, or just by dirt and dust collecting over thousands and thousands of years.

Archeologists do not know all about ancient people because some of the things they made have not lasted. Artifacts that are made from plants and animals do not last; these things are made from (6) ORGANIC material. Artifacts made from (7) INORGANIC material do <u>not</u> rot, so these are the ones that archeologists usually find.

The places where archeologists dig for artifacts are called SITES. Sites are named by their locations. For example, a site which is found in a desert is called DESERT SITE.

The names of some sites are

DESERT SITES

CAVE SITES

FROZEN SITES

JUNGLE SITES

If we know the location of a site, we can tell something about how well the objects in a site will last. Usually, things last better where it is DRY.

See if you know the correct answer. Put "✓" by it.

Where would artifacts last better and longer?

____desert site (turn to page 41)

____jungle site (turn to page 42)

RIGHT! GOOD!

Artifacts would be better preserved in a desert site because deserts are very dry.

Let me tell you about the words, TO PRESERVE, and PRESERVATION. They mean the same as the words, TO PROTECT, and PROTECTION.

Artifacts are preserved when they are in a place that protects them from harm.

Usually, artifacts are better preserved in a dry site, like a desert, than in a damp site like a jungle.

Skip page 42 and turn to page 43.

WRONG!

We said that artifacts would last longer at DRY sites. Is a jungle dry? No, usually jungles have a lot of rain, so things rot and decay quickly.

Turn back to page 40 and make another choice.

Cave sites are good places for preservation, too. The reason that caves are good sites is because they protect things inside them from the weather. Objects that are not in rain and snow and wind last longer than objects that are out in the weather.

So both CAVE SITES and DESERT SITES preserve or protect objects very well.

A FROZEN SITE is a place where the temperature is always below freezing. Preservation is even better at FROZEN SITES than it is at cave and desert sites. In fact, FROZEN SITES preserve artifacts best of all.

There are not many FROZEN SITES. In the first place, very cold parts of the earth have never had many people living in them. In the second place, there are not many places on earth where the weather is so cold that the temperature is always below freezing, winter and summer.

A FROZEN BURIAL SITE was found high on a mountain in Russia. The bodies in the burial site were so well preserved that tattoos on the skin were still easily seen. When the site was found, everything in it was so well preserved it seemed like it had been frozen just yesterday instead of thousands of years ago.

Put "✓" by the site where preservation is best.

____cave site

____desert site

____frozen site

____jungle site

Answer:

✓ frozen site

If you missed this, put "X" by your answer, and write the correct answer on the line at the bottom of page 44.

Preservation is BEST at FROZEN SITES, but there are not many of these sites.

Now mark the site where preservation is poorest.

____cave site

____desert site

____frozen site

____jungle site

Answer:

✓ jungle site

If you missed this, put "X" by your answer, and write the correct answer on the line at the bottom of page 45.

A jungle site is poorest for preservation because it is always damp. Dampness causes objects to rot, decay, or rust.

* * * * * * * *

Sites are named by the places where they are found. There are desert sites, cave sites, frozen sites, and jungle sites.

Sites are also classified by their USE. For example, a BURIAL SITE is where the dead have been buried.

The names of some sites by their USES are

BURIAL SITES

HABITATION SITES

CEREMONIAL SITES

ANIMAL KILL SITES

The name of the site tells what the people used it for. An ANIMAL KILL SITE is a place where people killed animals for food. You may be wondering how archeologists today know what a site was used for thousands of years ago. Here is how they know: the artifacts and other things at a site gave them clues. At an ANIMAL KILL SITE, an archeologist might find bones of animals and tools or pieces of tools that were used to kill the animals.

Sites are named by their USES. See if you can match these sites to their uses.

____Burial site	1. place where people lived
____Habitation site	2. place where people buried the dead
____Ceremonial site	3. place where people held religious ceremonies

Turn to page 48.

Answers:

2 Burial site

1 Habitation site

3 Ceremonial site

Let me tell you something about each of these.

BURIAL SITE

You probably already know what this is. A burial site is where a person or people have been buried. Often, all sorts of artifacts were buried with a person. It was believed that he would be able to continue using them after death. Archeologists can find out a great deal about ancient man from the artifacts he finds at burial sites.

HABITATION SITE

A habitation site is a place where people live. A habitation can be a house, a tent, a hut, or a palace. It can also be a town, a village, or a city. A habitation site is a place where people lived.

CEREMONIAL SITE

A ceremony is a special occasion. Ceremonial sites are places where special RELIGIOUS celebrations or RELIGIOUS festivals took place.

Can you match these:

____Burial site	1.	religious service
____Ceremonial site	2.	grave yard
____Habitation site	3.	house

Answers:

2 Burial site

1 Ceremonial site

3 Habitation site

Check your answers. Put "X" by the ones you missed.

* * * * * * * * *

Let's review the things we have talked about. This is NOT a test, but do your very best.

Mark "TRUE" or "FALSE"

_____1. Sites in jungles usually are not as good preservation as sites in caves.

_____2. Organic objects will decay quickly.

_____3. Archeologists study artifacts to learn about ancient people.

_____4. A stone arrowhead is an example of an inorganic artifact.

_____5. Frozen sites are not found very often.

_____6. Habitation sites are places where people once lived.

Answers:

All the statements are "TRUE". If you missed any, please put "X" by them. Then read the ones you missed again. Remember that all the statements are "TRUE".

* * * * * * * * *

You know that archeologists study artifacts in order to learn about man and his culture long ago. You also know that these artifacts are usually buried in the ground. Now I want to tell you how archeologists uncover or excavate artifacts.

TO EXCAVATE means to dig. TO EXCAVATE means to dig in a careful and planned way. When archeologists EXCAVATE a site, they first study the site. Then they make a map of it. Then they use wooden pegs to mark the site off into squares. Each peg is numbered. String is tied from peg to peg so that the site is divided into squares. The archeologists can then put a tag on each artifact to show exactly where it was found.

A site with pegs and strings.
The site is ready to be excavated.

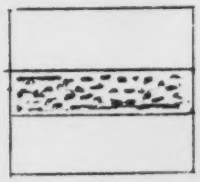
Archeologists keep very careful records of where <u>everything</u> is found at a site. Every object that is found is tagged, and a record is made as to which square it was found in, and exactly how deep it was buried. It is very important to keep records of what things are found near each other. The relationship of objects if often more important than the objects themselves.

After the site is studied and marked off with pegs and string, the digging or excavation begins.

Below are some drawings of how excavations would look from an airplance. THE DARK PARTS ARE WHERE THE DIRST HAS BEEN DUG OUT.

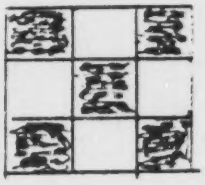
Look at the drawings carefully. Imagine that these are aerial photographs (pictures taken from an airplane), and that the sites are probably at least as big as your own yard and maybe even much much bigger.

TOTAL EXCAVATION



TRENCH EXCAVATION

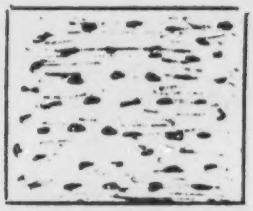
QUADRANT EXCAVATION



CHECKERBOARD OF PITS EXCAVATION

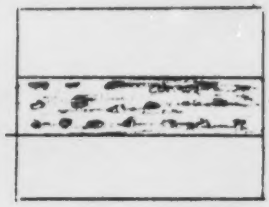
Look at these carefully and study their names.

As you can see from looking at the sketches, there are different ways to excavate a site. Archeologists have to decide which excavation method they will use on a particular site. I will tell you some more about the different excavation methods.



TOTAL EXCAVATION

The whole site is dug up in TOTAL EXCAVATION. Archeologists have the best chance of finding all the artifacts at a site if they use TOTAL EXCAVATION. If the site is big, TOTAL EXCAVATION takes a lot of money and time.



TRENCH EXCAVATION

TRENCH EXCAVATION does not take as much money or time as total excavation, but it is a good way to get an idea of what is located in a site. In a TRENCH EXCAVATION, a ditch is dug through the site. The archeologist can get an idea of the different layers of the site.

QUADRANT EXCAVATION

In QUADRANT EXCAVATION, the site is divided into four parts. One of these four parts (1/4) is dug up. The word, QUADRANT, actually means 1/4.

CHECKERBOARD OF PITS EXCAVATION

The CHECKERBOARD OF PITS is marked off into squares and then every other square is excavated. From an airplane the site really looks like a checkerboard, doesn't it? The CHECKERBOARD OF PITS excavation is used at sites where it is not necessary to dig very deeply into the earth.

Here are the names of different kinds of excavations.

Put the correct name under the pictures below.

TOTAL

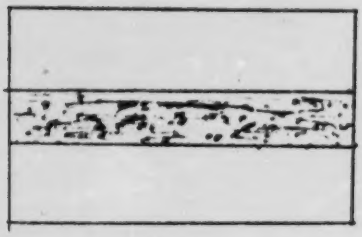
TRENCH

QUADRANT

CHECKERBOARD OF PITS

1. _____

(name)



2. _____

(name)

Answers:

1. Quadrant
2. Trench

Archeologists do not excavate a site all alone. At a "DIG" (a "dig" is slang for an excavation) there is always at least one archeologist, usually a few college students who are studying archeology, and some laborers. The archeologist uses his skill and knowledge to plan and direct the work. He does some of the hard work of digging, too. The college students get practical training to be archeologists. They are given a chance to keep records, make plans and decisions under the supervision of the archeologist. A lot of their time is spent doing the hard work of digging, also. All of the laborers' time is spent digging, carrying dirt, and doing the manual labor. Laborers who have had experience digging archeological sites are very helpful to the archeologist.

At times, excavating is exciting, but often it is just plain hard work. It might take weeks of work before even one little artifact is found.

Archeology is interesting to both boys and girls. President Johnson's older daughter spent a summer helping at a "dig" when she was in college.

If you were an archeologist, here are some of the tools you would use:

Pegs and strings to mark off the site.

Shovels and picks to dig out the dirt.

Wheelbarrows and baskets to carry the dirt away from the site to where it can be sifted.

Sieves (or screens) to sift the dirt carefully so that not even a tiny artifact will be overlooked.

Small tools like knives and paint brushes to dig out and clean off small objects.

Tape measures to measure off the site and to keep complete records of where objects were found.

Notebooks and cameras to make records.

These are just some of the tools used. Sometimes, at a very large site a bulldozer might be used to scrape off the top layer of earth and do some of the first dirt removal.

Put "✓" by the sentence that is true.

____Archeologists use tools like those that many of us have at home. (turn to page 59)

____Archeologists use tools that are so special and different that they cannot be used for anything else. (turn to page 60)

RIGHT! Good!

Archeologists use tools that many of us have at home.

It takes a lot of training to become an archeologist, but the tools that archeologists use are just "plain old tools."

Skip page 60, and turn to page 61.

WRONG!

Now think a minute! There is really nothing special about the tools that archeologists use. Lots of people who are not archeologists have the same tools.

Here are the names of the tools I told you about. I bet you have some of them at your house.

Shovel

Wheelbarrow

Paint Brush

Tape Measure

Notebook

Camera

Turn back to page 58 and choose another answer.

Archeologists want to know the age of sites and artifacts found at sites. There are two methods they use to find out about the age of objects. The methods are

ABSOLUTE DATING

and

RELATIVE DATING

Let's use these words to talk about YOUR age.

ABSOLUTE DATING

How old are you? _____ years old.

In what year were you born? _____.

These questions are concerned with ABSOLUTE DATING. The answers to the questions tell your age more or less ABSOLUTELY.

RELATIVE DATING

Compare your age with your mother's age. You are

_____older

_____the same age

_____younger

This question is concerned with RELATIVE DATING. The answer to the question tells the age of something only as it is compared with something else.

ABSOLUTE DATING: gives a fixed or exact age or year.

RELATIVE DATING: compares one object with another.

I used your age as just an example. The words, ABSOLUTE and RELATIVE DATING, usually are used to describe the age of artifacts and sites.

Here are two things an archeologist might say. Mark what kind of dating information each sentence contains.

1. "This arrowhead is the same age as that one."

   ____Absolute dating

   ____Relative dating

2. "This vase is 150 years old."

   ____Absolute dating

   ____Relative dating

Answers:

1. Relative
2. Absolute

Put "X" by the ones you missed on page 62.

In RELATIVE DATING, we are comparing and talking about the age of something in relation to something else. We say that something is older, the same age as, or less old than something else.

In ABSOLUTE DATING, we are talking about how old something actually is. We say that something is 150 years old, or something was made in the year, 1520. In ABSOLUTE DATING we can give more exact information than we can in RELATIVE DATING.

Remember: If all we can do is compare one object with another, this is RELATIVE DATING. If we can use actual numbers of dates in talking about the age of something, this is ABSOLUTE DATING.

Let's talk about a RELATIVE DATING method that is called STRATIGRAPHY.

The earth is made up of different layers (or strata) of rock and soil. Over thousands of years, different strata (or layers) are built up. The newer layers are near the surface of the earth, and the older strata are deeper. THE DEEPER YOU DIG DOWN, THE OLDER THE STRATA.

Take your time and answer these questions:

1. What is another name for layer? _____
2. What method of relative dating are you learning about on this page? _____

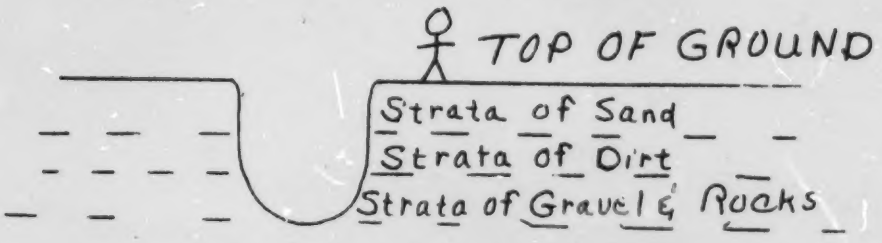
_____

_____

Answers:

1. STRATA
2. STRATIGRAPHY

Put "X" by the ones you missed, and then put the correct answer on the line at the bottom of page 64.



If you could dig a deep hole, you might find first a layer of sand, then a layer of dirt, then a layer of gravel and rocks.

The picture above shows what you might find. Which strata would be older?

____strata of sand (turn to page 66)

____strata of gravel and rocks (turn to page 67)

WRONG!

You see, layers of earth are being built up all the time, and the strata closer to the surface are not as old as the deeper strata. We know that deeper strata are older than strata near the top.

Look at the picture again on page 65, and make another selection.

RIGHT! GOOD!

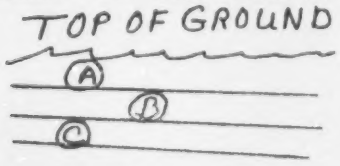
Stratigraphy works sort of like a full trash can. In a full trash can, the paper at the bottom got put there before the paper at the top. In stratigraphy, the deeper strata of the earth "got put there" (are older than) the strata at the top.

If artifacts are found in different strata of an excavation, archeologists know something about the age of them. This way of RELATIVE DATING is called STRATIGRAPHY.

STRATIGRAPHY means study of the strata or layers.

By the method of STRATIGRAPHY, we know that the artifacts found in deeper layers of the earth are older than the artifacts found in shallow strata of the earth.

Use your knowledge of stratigraphy to answer these question. Be VERY careful!



1. Which artifact is older?

A

B

2. Which one of these is less old?

B

C

Answers:

Both answers are (B)

Put "X" by the ones you missed.

Remember that the deeper strata of the earth are older.

Another type of RELATIVE DATING is called SERIATION. In this dating, the type or style of an object gives clues as to its relative age. For instance, if I show you a picture of a new Ford car 15 years ago, and a picture of a new Ford car today, you can tell me which car is newer, can't you? You might not be able to tell me the year each car was made, but you can say, "This car is older than that." You would probably use shape and style of the cars to decide on your answer.

The same method is used on a lot of artifacts. Pottery, tools, and arrowheads have changed and improved through the years. Archeologists can compare two pieces of pottery made by the same group of people, or two different styles of arrowheads. They can decide which is older than which.

Archeologists study the changes, and can tell the relative age of objects by the improvements and changes that are made in styles. This relative dating method is called SERIATION.

* * * * * * * * *

So far, we have talked about two kinds of relative dating:

1. stratigraphy
2. seriation

Use these words to fill in the blanks:

ABSOLUTE

RELATIVE

SERIATION

STRATIGRAPHY

1. The series or styles of artifacts may help in dating an artifact. This dating method is called _____.

2. _____ dating tells whether an object was found in a deeper or more shallow layer of earth.

3. In _____ dating, the archeologist is able to state a definite, fixed age of an object.

_____

_____

_____

Answers:

1. Seriation
2. Stratigraphy
3. Absolute

Put "X" by the ones you missed, then write the correct answers on the lines at the bottom of page 69.

You have read about two relative dating methods:

STRATIGRAPHY

and

SERIATION

Now I want to tell you about some ABSOLUTE DATING methods.

You have learned that ABSOLUTE DATING gives a more or less exact year. Archeologists have several methods of ABSOLUTE DATING. The four methods I will tell you about are:

CALENDRICAL DATING

DENDROCHRONOLOGY

CARBON-14 DATING

POTASSIUM-ARGON DATING

These words probably do not mean much to you now, but I will explain them.

The word, CALENDRICAL, is in the same word family as a word you already know, CALENDAR.

Look at the words:

CALENDRICAL

CALENDAR

You can see that they look a lot alike. Their meanings are similar, too.

Our calendar system is not the only calendar system in the world. Man has used many different calendar systems. Our year, 1970, might be the year, 10,000, in another calendar system. The 10,000 of another system does not tell us anything unless we can put it into our own calendar system. If we know that the year, 10,000, in a different system means 1970 in our system, then we are using the CALENDRICAL DATING method.

CALENDRICAL DATING is a dating method that uses different calendar systems developed by man. In CALENDRICAL DATING, we can translate or change one calendar system into another calendar system.

Put "✓" by the correct answers.

1. In which dating method do archeologists study layers of earth?

   _____absolute dating _____stratigraphy

2. In which method do archeologists use calendars?

   _____relative dating _____calendrical

Answers:

1. stratigraphy
2. calendrical

Put "X" by the ones you missed.

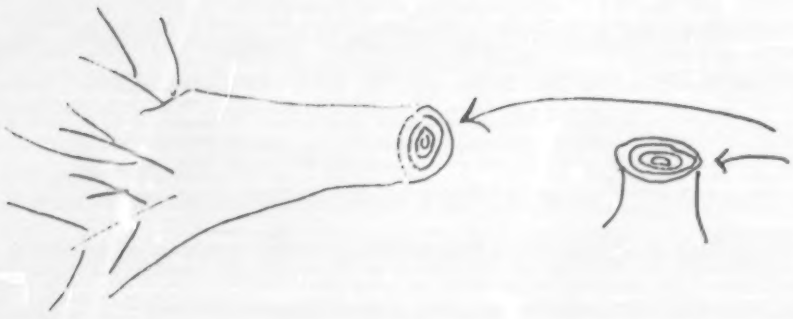
DENDROCHRONOLOGY

Another absolute dating method is DENDROCHRONOLOGY. This method is also called "tree ring dating." When a tree is cut, we can see a number of rings inside the trunk. Every year the tree grows another ring. By counting the rings, we can tell how old the tree is.

DENDROCHRONOLOGY is a method of finding out the age of something made out of wood by counting the rings in it.

Archeologists use DENDROCHRONOLOGY on trees and wooden objects found at sites.

DENDROCHRONOLOGY = TREE RING DATING



The two absolute dating methods I've told you about are

CALENDRICAL DATING

and

DENDROCHRONOLOGY

There are two other absolute methods that are important

CARBON-14 DATING

and

POTASSIUM-ARGON DATING

Carbon-14 and potassium-argon dating are alike because they both study the chemical changes that take place in material. They are different, too. Let me tell you how they are alike and different.

CARBON-14 DATING

Organic material (plants and animals) contain a certain amount of a chemical called CARBON-14. Scientists know how much CARBON-14 living things contain. When the plant or animal dies, the CARBON-14 begins to change very slowly into another chemical. Archeologists can measure the amount of CARBON-14 remaining in a once living object and tell how long the object has been dead.

This is called CARBON-14 DATING. It is used on ORGANIC material.

POTASSIUM-ARGON DATING

Some rocks contain a certain amount of a chemical called POTASSIUM. Scientists know how much POTASSIUM is in newly formed rocks. Scientists also know that POTASSIUM changes into another chemical, ARGON, at a certain slow rate. Archeologists can measure the amount of POTASSIUM in a rock and tell how old the rock is.

This is called POTASSIUM-ARGON DATING. It is used on rock and other material containing POTASSIUM.

1. Which method of absolute dating studies the chemical changes in rock? _____
2. Which method of absolute dating studies the chemical changes in organic material? _____

1. Potassium-Argon
2. Carbon-14

Put "X" by the ones you missed.

Did you miss any?

_____Yes, I missed some. (Turn to page 77)

_____No, I got them right. (Turn to page 78)

I'm sorry you missed some. Maybe I can help you get straightened out.

Carbon-14 dating - This method of dating measures the amount of Carbon-14, a chemical, left in a once living object. The longer the object has been dead, the less carbon-14 it contains. Carbon-14 dating is used on organic material.

Potassium-Argon dating - This method of dating measures the amount of potassium, a chemical, in rocks. Potassium changes into argon, another chemical, at a certain rate. The older the rock, the less potassium and the more argon. Potassium-argon dating is used on rocks which contain potassium.

GOOD!

Now let's see how you can do on this REVIEW.

Use the words below to fill in the blanks.

CALENDRICAL DATING

CARBON-14 DATING

DENDROCHRONOLOGY

SERIATION

STRATIGRAPHY

1. _____ is called "tree ring dating."
2. _____ is a dating method that studies the layers of earth where objects are found.
3. _____ is one dating method that studies the chemicals an object contains.
4. _____ is a dating method that studies changes in the way artifacts are made.

Answers:

1. Dendrochronology
2. Stratigraphy
3. Carbon-14
4. Seriation

Put "X" by the ones you missed.

Did you miss any?

_____Yes (Turn to page 80)

_____No (Turn to page 81)

You missed some of the questions. Maybe I can help you. Here is some more information about methods of dating artifacts.

Read and think about each one.

Calendrical dating: a method of dating using different calendar systems developed by man.

Carbon-14 dating: a method of dating based on the amounts of Carbon-14, a radio-active chemical, left in organic material after death.

Dendrochronology: a dating method used on wooden objects. The rings inside a tree trunk tell the age of the tree or wood.

Seriation: a method of dating based on the type or style of an object. This method studies how the style or shape of things change over the years. Remember, I gave you the example of Ford cars?

Stratigraphy: a method of dating which uses the layer of earth where an object is found to tell whether it is older or less old than another object. Deeper objects are older.

Turn the page, please.

GOOD!

You have worked hard and learned a lot of new things. Here are some questions to help you review the things you have studied.

Circle either "TRUE" or "FALSE"

TRUE FALSE 1. Stratigraphy is the study of rings in trees.

TRUE FALSE 2. An organic artifact can be made from wood.

TRUE FALSE 3. A site where people lived is a ceremonial site.

TRUE FALSE 4. If an archeologist can decide how old something is, he is using an absolute dating method.

TRUE FALSE 5. Frozen sites are well preserved but there are not many of them.

TRUE FALSE 6. In a quadrant excavation, 1/4 of the site is excavated.

Please turn the page when you finish.

Answers:

1. **FALSE**
2. **TRUE**
3. **FALSE**
4. **TRUE**
5. **TRUE**
6. **TRUE**

Put "X" by the ones you missed. Wait a minute! Check all your answers carefully!

All the questions are "TRUE" except 1 and 3. I will change these questions to make them "TRUE", too. Read below.

Question 1: Dendrochronology, not stratigraphy, is the study of rings in trees.

Question 3: A site where people lived is a habitation site, not a ceremonial site.

Locating sites and excavating them is not all there is to archeology. Once the site is excavated, there is still much work to be done.

A lot of archeological work is done in a laboratory. Sometimes a laboratory is set up at the excavation site. Sometimes the artifacts are sent to a university or museum laboratory.

These kinds of work are done in laboratories:

CLEANING

DATING

RESTORATION

PRESERVATION

DESCRIPTION

I don't think I have to explain all of these things to you. You already know what some of them mean.

You know that when artifacts are dug out of the ground, there is dirt on them. CLEANING is just getting the dirt off. Some artifacts can be cleaned with water. Water might hurt other artifacts so they are cleaned with other things.

You already know about DATING, too. Remember relative and absolute dating? Most DATING is done in the laboratory.

Other things are done in the archeology laboratory, too.

RESTORATION

RESTORATION is putting broken things, or things that have come apart, back together. Many artifacts are broken when they are found. They are RESTORED or put back together in the laboratory.

PRESERVATION

Not only do artifacts need to be restored, they must be PRESERVED, too. PRESERVATION is needed to keep the artifacts from falling to pieces once they have been dug up. Objects are PRESERVED by being treated with lacquer or other chemicals that will keep them from harm.

Put "✓" by the correct answer.

Which of these protects an object from damage?

_____preservation (turn to page 85)

_____restoration (turn to page 86)

RIGHT! Good!

Preservation is needed to keep things from falling to pieces after they have been dug up. Preservation really protects objects from change or decay.

Restoration is fixing broken things. Restoration is repairing damaged objects.

Skip page 86 and turn to page 87.

WRONG!

Restoration is fixing broken things. Restoration does not protect objects.

Turn back to page 84 and make another choice.

One other thing is done in the laboraory. It is called

DESCRIPTION

In DESCRIPTION, a detailed record is made of such things as the weight of an artifact, its exact size, and the material of which it is made.

Again, here are the things that are done in the laboratory after a site is excavated:

CLEANING

DATING

RESTORATION

PRESERVATION

DESCRIPTION

After the excavation and the cleaning is done, the archeologist still has a lot to do. Two of the most important things archeologists do are

INTERPRETATION

and

PUBLICATION

INTERPRETATION

Archeologists keep very careful records and make pictures of everything they find at a site. They know exactly where artifacts were found, how deep they were buried, and what was near them.

Archeologists use all the records they have kept to make an INTERPRETATION. They must explain what they have found. An INTERPRETATION is an explanation. Archeologists use all the information they have to try to explain the culture of the people who used the site.

If a lot of broken pottery was excavated, the archeologist knows that the people used pottery. If many bones of wild animals were found, the archeologist might INTERPRET that the people were hunters.

INTERPRETATION is a very important part of the work of an archeologist. INTERPRETATION is really taking all the pieces of information that are known and putting them together to explain the culture of a group of people.

PUBLICATION

Archeologists write their interpretations, and PUBLISH them. TO PUBLISH means to have articles or books printed so that other people can read them. It is very important for archeologists to tell other archeologists what they have found. Most of the articles are PUBLISHED in special journals (or magazines) which archeologists read. Sometimes the articles are printed again in newspaper and books that you and I read. Your library may have some good archeological books to read.

See if you can get all of these right. Use the words listed below to fill in the blanks.

CLEANING

INTERPRETATION

PRESERVATION

PUBLICATION

RESTORATION

1. Putting broken artifacts back together is called _____.
2. An archeologist takes all the information he has about a site and uses it to explain the culture of the people. This is called _____.
3. Archeologists have articles printed in journals and books. This is called _____.
4. Carefully removing dirt from artifacts is called _____.

Answers:

1. RESTORATION
2. INTERPRETATION
3. PUBLICATION
4. CLEANING

Put "X" by the ones you missed.

Did you miss any?

_____Yes (Turn to page 91)

_____No (Turn to page 92)

Let's see if I can explain these words a little better!

RESTORATION and PRESERVATION

A lot of the artifacts that archeologists find are broken. RESTORATION is putting them back together again.

When archeologists find artifacts, they want to keep them. To keep them from being damaged, they might paint them with clear paint or put some chemical on them to protect them from harm. This is called PRESERVATION.

INTERPRETATION and PUBLICATION

Archeologists must explain what they have found. This explaining is called INTERPRETATION.

It is important that an archeologist tell other archeologists what he has found. This is the reason that they write articles and books. They have these printed. This is called PUBLICATION.

CLEANING

Of course, you know that this is the very first thing that is done when an artifact is found. The dirt is CLEANED off. Sometimes it is done with water; sometimes chemicals are used to clean the artifact.

Somedayy, you might find an old artifact or site. If you do, don't try to be an archeologist and dig a site. Instead, you should contact the museum or university nearest you. Archeology takes years of training, and if you and I try to excavate without this training, we might ruin valuable information. Do not EVER try to be an amateur "digger."

I hope you have learned something about archeology. I hope you have enjoyed this book, too!

This page is for you to keep a record of how far you have read in the book.

Your teacher will tell you how to keep your record. Please write CLEARLY.

1. Today's date is _____.
   I started reading at _____ o'clock.
   I stopped reading at _____ o'clock.
   I read to page _____.

2. Today's date is _____.
   I started reading at _____.
   I stopped reading at _____.
   I read to page _____.

3. Today's date is _____.
   I started reading at _____.
   I stopped reading at _____.
   I read to page _____.

4. Today's date is _____.
   I started reading at _____.
   I stopped reading at _____.
   I read to page _____.

5. Today's date is _____.
   I started reading at _____.
   I stopped reading at _____.
   I read to page _____.

6. Today's date is _____.
   I started reading at _____.
   I stopped reading at _____.
   I read to page _____.

7. Today's date is _____.
   I started reading at _____.
   I stopped reading at _____.
   I read to page _____.

I finished the book on _____.
(DATE)

PRONUNCIATION GUIDE

FOR

ARCHEOLOGICAL METHODS

by

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HOW TO USE THE PRONUNCIATION GUIDE

Words that you need to know how to pronounce in Archeological Methods, a programmed text, are listed in columns in the following pages. The words are first printed as you will read them in the text. Then the word is divided into syllables to help you learn to pronounce it.

Your teacher will play a tape recording of the words so that you can hear the words and practice saying the words.

After you have learned to pronounce the words, you will study a special kind of text called a programmed text that will explain the meanings of the words.

While you are studying the text, you may want to review the tape by yourself or with some other students.

WORDS FROM THE ARCHEOLOGICAL METHODS PROGRAMMED TEXT

WORDS	DIVIDED INTO SYLLABLES
archeology	ar-che-ol´o-gy
archeologist	ar-che-ol´ o-gist
prehistoric	pre-his-tor´ic
ancient	an´cient
culture	cul´ture
artifact	ar´ti-fact
organic	or-gan´ic
inorganic	in-or-gan´ic
erosion	e-ro´sion
site	site
preserve	pre-serve´
preservation	pres-er-va´tion
habitation	hab-i-ta´tion
ceremonial	cer-e-mo´ni-al
quadrant	quad´rant
relative	rel´a-tive
absolute	ab´so-lute
strata	stra´ta

WORDS	DIVIDED INTO SYLLABLES
stratigraphy	stra-tig´ra-phy
seriation	se-ri-a´tion
calendrical	cal-en´dri-cal
dendrochronology	den-dro-chro-nol´o-gy
potassium-argon	po-tas´si-um - ar´gon
interpretation	in-ter-pre-ta´tion
excavate	ex´ca-vate
excavation	ex-ca-va´tion

ARCHEOLOGICAL METHODS TEST

FORM A

Do not make any marks on this test. You will be given an answer sheet and your teacher will explain to you how to use it.

1. Which of these would an archeologist be least likely to do?

   1. excavate a site
   2. search for artifacts
   3. write articles to be published
   4. study the habits of wild animals

2. A method of dating using different calendar systems developed by man is

   1. relative dating
   2. seriation dating
   3. calendrical dating
   4. stratigraphic dating

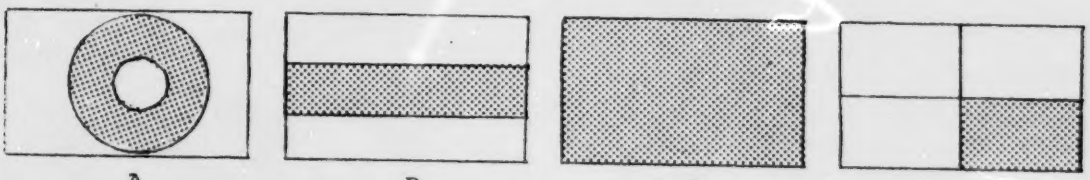
3. Which of these is something we cannot learn about prehistoric people from their artifacts?

   1. how they talked
   2. what they ate
   3. what they wore
   4. what kind of homes they had

4. Which method of dating measures the rate of chemical change in objects?

   1. stratigraphy
   2. carbon-14
   3. potassium-argon
   4. both B and C

Here are some sketches of excavation methods. The dark places are where dirt has been removed. Questions 5 - 8 are about the sketches.



5. Which of the above excavations is a trench excavation?

   1. A
   2. B
   3. C
   4. D

6. Which of the above excavations is a quadrant excavation?

   1. A
   2. B
   3. C
   4. D

7. Which of the excavations would probably cost the most money and take the most time?

   1. A
   2. B
   3. C
   4. D

8. Which of the excavation methods would tell an archeologist the most about what is buried at a site?

   1. A
   2. B
   3. C
   4. D

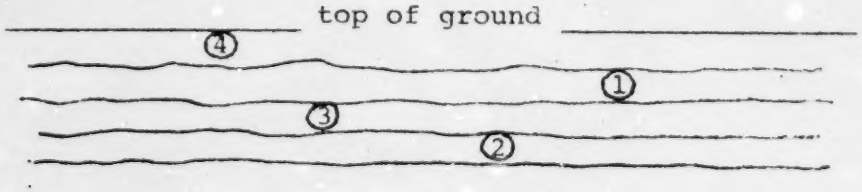
9. Objects that are made by man are called

   1. organic
   2. inorganic
   3. artifacts
   4. sites

10. The dating method which gives a more or less fixed date is called

    1. relative
    2. absolute
    3. seriation
    4. stratigraphy

Here is a sketch of an excavation showing different strata. The circled numbers show where objects were found. Use the sketch to answer question 11.



11. Object 3 is older than

    1. object 1 only
    2. object 4 only
    3. object 2 only
    4. objects 1 and 4

12. Which of these is made of organic material?

    1. a stone arrowhead
    2. an animal bone
    3. a piece of pottery
    4. a tin can

13. Very old artifacts are often found buried in the ground. How do they get buried?

    1. They get buried on purpose, like in graves.
    2. They get buried by volcanoes and earthquakes.
    3. They get buried by dust and dirt over years and years of time.
    4. All of the above are ways that artifacts get buried.

14. Here are some artifacts we use today. Imagine you are an archeologist a thousand years from now. Which artifact would you <u>most likely</u> find?

    1. a china coffee cup
    2. a dish cloth
    3. a bar of soap
    4. a baseball bat

15. The dating method which can only be used on trees or objects made of wood is called

    1. dendrochronology
    2. preservation
    3. stratigraphy
    4. seriation

16. The study of man's past through written records is

    1. anthropology
    2. archeology
    3. biology
    4. history

17. The careful removal of dirt from a site is called

    1. exploration
    2. excavation
    3. interpretation
    4. seriation

18. Which of these is made of inorganic material?

    1. a chicken bone
    2. a leather glove
    3. a piece of wood
    4. a stone arrowhead

19. Absolute dating methods help answer which one of the following questions?

    1. Is this object older than, less old than, or the same age as that object?
    2. Is this object radioactive?
    3. About how many years old is this object?
    4. How deep was this object buried in the ground?

20. Artifacts that have not lasted a long time were probably made from

    1. organic material
    2. inorganic material
    3. stratigraphic material
    4. stone material

21. Here are some different kinds of sites. Which is the <u>poorest</u> one for preservation of artifacts?

    1. cave site
    2. desert site
    3. frozen site
    4. jungle site

22. Imagine that you are an archeologist. You excavate a site and locate an animal skull. Which dating method would you use on the skull to give the most exact date?

    1. carbon-14
    2. dendrochronology
    3. stratigraphy
    4. seriation

23. A place archeologists excavate is called

    1. an anthropologist
    2. a quadrant
    3. a site
    4. a strata

24. The years before writing was invented and written records kept is called

    1. historic

2. prehistoric
3. olden days
4. the Middle ages

25. Protection of an artifact from injury or decay is called

1. excavation
2. preservation
3. salvation
4. termination

26. Heavy rains sometimes wash the dirt away from buried artifacts. This is an example of

1. erosion
2. dendrochronology
3. habitation
4. stratigraphy

27. Which of these is an artifact?

1. animal bone
2. stone
3. tree
4. vase

28. A person who is not an archeologist

1. should dig a site very carefully
2. should not try to dig a site at all
3. should dig a site only if it is on his own property
4. should not dig a site unless it is small

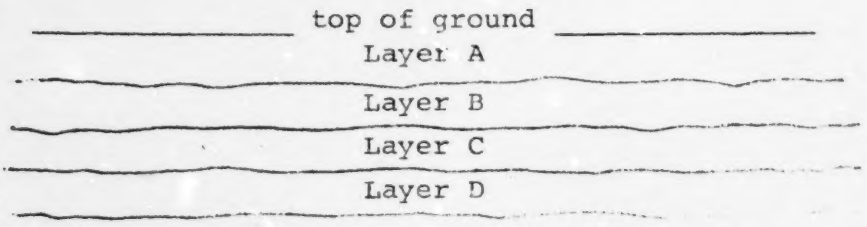
29. A prehistoric site is a site that

1. has not been excavated
2. does not contain artifacts
3. was used before written records were kept
4. always contains dinosaur bones

30. Archeologists call the ways of life of a group of people its

1. archeology
2. artifacts
3. culture
4. history

On the following page is a sketch of an excavation through several strata of soil. Use the sketch to help you answer question 31.



31. An artifact found in layer B would be <u>older</u> than

    1. artifacts in layer D only
    2. artifacts in layer C only
    3. artifacts in layers C and D
    4. artifacts in layer A only

32. If you use relative dating on an object, you

    1. decide whether it is older than, less old than, or the same age as some other object
    2. decide whether it is radioactive or not
    3. decide about how many years old it is
    4. measure how deep it was buried in the ground

33. A habitation site is where people

    1. kept animals
    2. hunted
    3. lived
    4. worshipped

34. Which statement is <u>true</u>?

    1. artifacts are man-made objects
    2. most people today do not own any artifacts
    3. artifacts are always worth a lot of money
    4. a bird nest is an artifact

35. A word that archeologists use to describe material that has never been alive is

    1. organic
    2. inorganic
    3. historic
    4. prehistoric

36. An archeologist is a person who studies

    1. climates of the earth
    2. how the earth was formed
    3. types of animals
    4. prehistoric cultures

37. Which one is not an artifact?

1. a penny
2. a cat
3. a spoon
4. a calendar

38. A place where people went for religious purposes is called

1. a ceremonial site
2. a habitation site
3. an historic site
4. a seriation site

39. Which of the sentences below tells us why we do not know everything about prehistoric man?

1. Prehistoric man did not look like us.
2. The only information we have is from the artifacts that have been found.
3. Very few people are interested in prehistoric man.
4. No careful studies of prehistoric man have been made.

40. Which word describes material which was or is living?

1. organic
2. inorganic
3. historic
4. prehistoric

41. Tree ring dating is called

1. calendrical
2. dendrochronology
3. carbon-14
4. stratigraphy

42. Which of these is an example of culture?

1. a school
2. color of skin
3. a vein of coal
3. sunset

43. The layers of earth in which objects are found is important in which kind of dating?

1. absolute
2. carbon-14
3. dendrochronology
4. stratigraphy

44. Imagine you are an archeologist. You find the bones of many wild animals and many smooth round stones in an excavation. You will probably decide that the people hunted animals for food using the smooth round stones. This part of an archeologist's job is calle

1. interpretation
2. intuition
3. preservation
4. description

45. What sort of tools do archeologists use?

1. hammers, nails and screwdrivers
2. brooms, mops and pans
3. picks, shovels and tape measures
4. saws, ladders and axes

46. Imagine you are an archeologist excavating a site. In what order would you use these tools?

1. bulldozer, small brush, shovel
2. bulldozer, shovel, small brush
3. shovel, bulldozer, small brush
4. small brush, shovel, bulldozer

47. Scientists who learn about man's past by studying artifacts are

1. archeologists
2. biologists
3. geologists
4. stratigraphers

48. What is the best order of work for an archeologist?

1. locate site, excavate, preserve
2. excavate, publish, interpret
3. preserve, locate site, interpret
4. publish, preserve, excavate

49. Putting broken objects back together is called

1. inspiration
2. restoration
3. interpretation
4. excavation

50. Style and shape of artifacts is important in what type of dating?

1. stratigraphy
2. dendrochronology
3. seriation
4. calendrical

ARCHAEOLOGICAL METHODS TEST
KEY FOR FORM B

ANTHROPOLOGY CURRICULUM PROJECT
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1.	2	21.	3	41.	3
2.	3	22.	3	42.	3
3.	3	23.	2	43.	4
4.	1	24.	3	44.	2
5.	4	25.	4	45.	3
6.	1	26.	2	46.	1
7.	1	27.	1	47.	1
8.	2	28.	4	48.	2
9.	1	29.	3	49.	2
10.	4	30.	4	50.	4
11.	4	31.	1		
12.	3	32.	2		
13.	4	33.	1		
14.	4	34.	1		
15.	1	35.	2		
16.	2	36.	1		
17.	33	37.	2		
18.	4	38.	1		
19.	1	39.	3		
20.	4	40.	1		